SYSTRANS - Introduction

General Information

The Natural utility SYSTRANS allows you to transfer all Natural objects, maps, DDMs, libraries, command processors and error messages as well as Adabas FDTs from one hardware platform to another.

To be able to do this, the SYSTRANS utility uses a general record layout. This general record layout is independent of all hardware platforms and is used only for transporting objects. Natural objects are read from one hardware platform and then restructured according to the general record layout using the Unload function of the utility.

The formatted records are written to a Natural work file which can be transported to another platform using standard file transfer services. On the target platform, the Natural objects can then be read from the work file, and loaded into the local file or database system using the Load function of SYSTRANS. Natural objects are read from the work file and then restructured according to the structure of the new hardware platform.

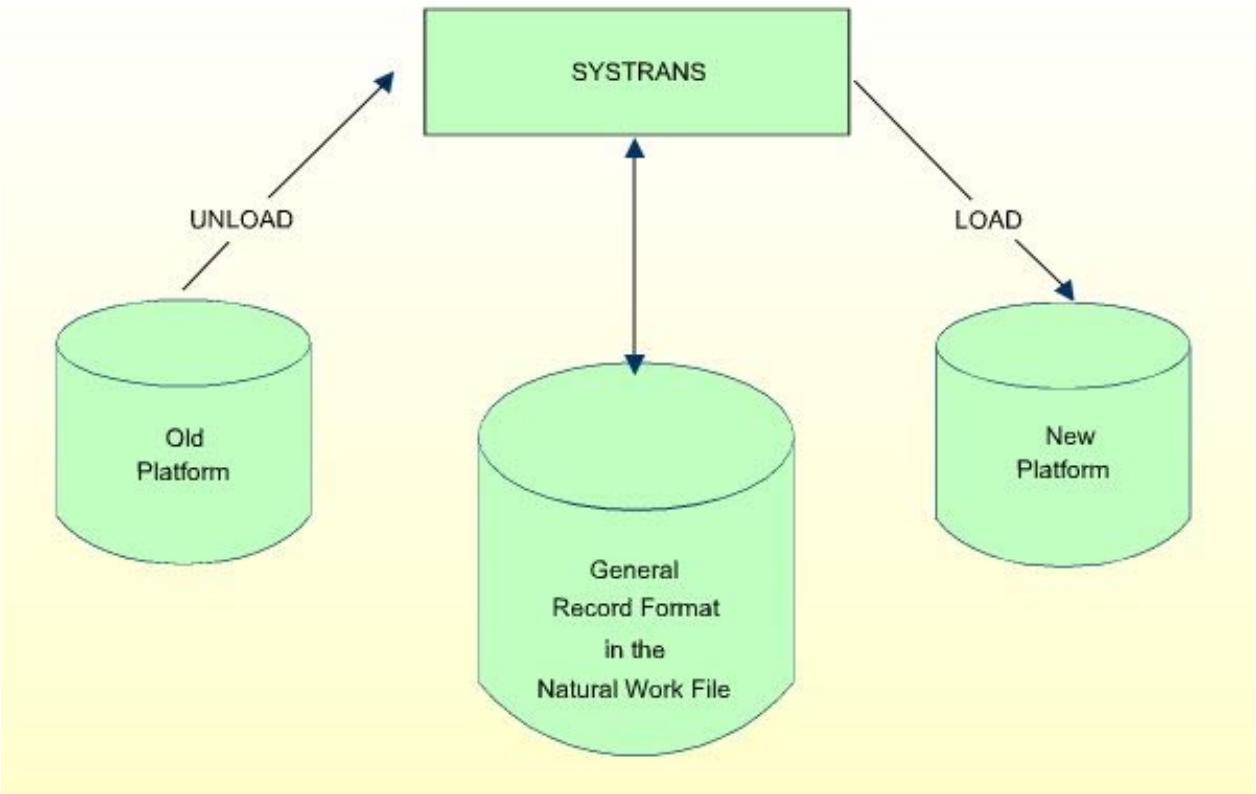
Warning:
When you are unloading objects, only one file per unload session is assigned to the work file.

When you are unloading or loading command processors, LFILE 190 must point to an Adabas file for command processor sources.

Any functionality of the SYSTRANS utility can be restricted by using the user exit TRA-E1-S provided in the library SYSTRANS; for further details, refer to the information provided in the TRA-E1-S source.

You can define a profile for your SYSTRANS utility, both generally and user-specifically. For this purpose, Natural is delivered with the text object PROFILE. To activate this profile, you have to resave PROFILE under the name TRANPROF in the library SYSTRANS. See more information in the section SYSTRANS Profile.

The following graphic shows how the SYSTRANS utility works when transferring a Natural application from one platform to another:



The SYSTRANS functions Unload, Load, Scan and Restart can also be executed in direct-command mode or from within a Natural application; see also the section Direct Commands and CALLNAT Interface.

Invoking SYSTRANS Online

There are two methods for invoking the SYSTRANS utility for interactive usage:

To invoke SYSTRANS online from any Natural library

- Enter the command SYSTRANS.
  If you issue a Natural system command from the SYSTRANS command line, the command will apply to the library from which SYSTRANS has been invoked.

To invoke SYSTRANS online from the Natural Main Menu

1. Select Maintenance and Transfer Utilities.
   The corresponding menu is displayed.
2. Select Transfer Objects to Other Platforms.
   The SYSTRANS Main Menu is displayed.

The SYSTRANS Main Menu offers the following options:

Unload TRANSFER Objects

Load TRANSFER Objects

Direct TRANSFER Functions

Scan TRANSFER Work File

Restart TRANSFER Load

See the corresponding sections for a description of these functions.

Name and Range Specification

To select Natural objects, maps, DDMs or command processors, you can specify a name or a range of names.

In the list of options below, *value* is any combination of one or more characters:

	Input	Selected Items
Start Value	*value*>	All items whose names are greater than or equal to *value*. Example: AB> Selected: AB, AB1, BBB, ZZZZZZZ Not selected: AA1, AAB
End Value	*value*<	All items whose names are less than or equal to *value*. Example: AX< Selected: AB, AWW, AX Not selected: AXA, AY
Leading Characters	*value**	All items whose names begin with *value*. Example: AB* Selected: AB, AB1, ABC, ABEZ Not selected: AA1, ACB

SYSTRANS and Entire Connection

You can use Entire Connection for Windows to transfer small applications between sessions in Natural mainframe or UNIX environments and sessions on the PC. You can also use Entire Connection to unload or load transfer files to or from a PC.

Note:
The size of a library to be transferred by Entire Connection is limited by the available disk space and time. The size of a library can be estimated by adding up the values for "Size in ESIZE" for saved Natural objects, which can be obtained by issuing the command "L DIR *".

If you use Entire Connection, Work File 7 must be defined as Entire Connection work file.

For the definition of the work files, see Unload Work File Specifications (section: Unload Function) and Load Work File Specifications (section: Load, Scan and Restart Load Functions).

Entire Connection automatically converts the transferred data from EBCDIC to ASCII or vice versa; therefore, the SYSTRANS conversion option should not be set to Y (Yes).

Note:
Work File 3 does not have to be a PC work file.

Before you start the SYSTRANS utility, you have to enter the command "%+" to enable the Entire Connection communication with the PC.

You invoke and use the Unload Function and the Load, Scan and Restart Load Functions in exactly the same way as described in the corresponding sections.

Once you have specified the parameters for one of the options of either function, you are prompted to enter the name of the file to which the data are to be downloaded.

After completing an unload session, you have to return to the SYSTRANS Main Menu to close Work File 7.

SYSTRANS and Natural Security

For the use of SYSTRANS in a Natural Security environment, see the section Protecting Utilities in the Natural Security documentation.

